Application No. 09/767,149
Amdt. dated February 4, 2004
Reply to Office Action of November 4, 2003
Docket No. 8027-1027

## APPENDIX:

The Appendix includes the following item:

- a copy of an English abstract of JP 11271715.



## ACTIVE MATRIX TYPE LIQUID CRYSTAL DISPLAY DEVICE

Patent Number:

JP11271715

Publication date:

1999-10-08

Inventor(s):

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Applicant(s):

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Requested Patent:

☐ JP11271715

Application Number: JP19980078923 19980326

Priority Number(s):

IPC Classification:

G02F1/133; G09G3/36

EC Classification:

Equivalents:

## Abstract

PROBLEM TO BE SOLVED: To provide the active matrix type liquid crystal display device by which excellent display quality can be secured for a long period with relatively simple circuitry. SOLUTION: This active matrix type liquid crystal display device 1 is equipped with a liquid crystal display panel including pixel electrodes 25 which are arranged in matrix, signal lines and scanning lines wired to the pixel electrodes 25 through thin film transistors 21, a counter electrode 43 which faces the pixel electrodes 25, and a liquid crystal layer arranged between the pixel electrodes 21 and counter electrode 43, a signal line driving circuit 71 which is connected to the signal lines, a scanning line driving circuit 81 which is connected to the signal lines, a counter electrode driving circuit 61 which supplies a counter voltage Vcom to the counter electrode 43, and a detecting circuit 53 which detects operation abnormality or an end, and the device 1 makes a display, based upon a control signal and a data signal which are supplied from outside; and the scanning line driving circuit 81 turns on the thin film transistors 21 connected to all the scanning lines according to the output of the detecting circuit 53.

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